

AMENDMENTS TO THE CLAIMS

The current claim set should now replace any claim set of record.

1. (Currently amended) A method for detecting allergens by using 2 or more monoclonal antibodies recognizing native and denatured milk allergens, native and denatured albumen allergens, native and denatured flour allergens, native and denatured buckwheat allergens, or native and denatured peanut allergens, using ~~αs1~~ αs1 casein which is the main protein of ~~αs1~~ milk casein, β-lactoglobulin which is the main protein of whey, ovalbumin and ovomucoid which are main proteins of albumen, gliadin which is the main protein of flour, proteins with a molecular weight of 24kDa and 76kDa which are main proteins of buckwheat, or Arah1 which is the main protein of peanut, as an index.
2. (Original) A method for detecting milk allergens wherein a monoclonal antibody recognizing native milk allergens and a monoclonal antibody recognizing denatured milk allergens are used in combination.
3. (Original) The method for detecting milk allergens according to claim 2, wherein 2 or more monoclonal antibodies recognizing different epitopes are used as monoclonal antibodies recognizing native milk allergens and/or denatured milk allergens.
4. (Currently amended) The method for detecting milk allergens according to claim 2 ~~or 3~~, wherein the monoclonal antibody recognizing native milk allergens and/or denatured milk allergens is an anti-αs1 casein monoclonal antibody.

5. (Original) The method for detecting milk allergens according to claim 4, wherein the anti- α s1 casein monoclonal antibody recognizes a native α s1 casein, an urea-treated α s1 casein, a native sodium casein and a denatured sodium casein.

6. (Currently amended) The method for detecting milk allergens according to claim 4 ~~or~~ 5, wherein the anti- α s1 casein monoclonal antibody recognizes the 132 - 193 position of the amino acid sequence of α s1 casein shown by SEQ ID NO:1.

7. (Currently amended) The method for detecting milk allergens according to ~~any one of claims~~ claim 4 ~~to~~ 6, wherein the anti- α s1 casein monoclonal antibody is the anti- α s1 casein monoclonal antibody Pas1CN1 produced by hybridoma (FERM ABP-10263) and/or the anti- α s1 casein monoclonal antibody Pas1CN2 produced by hybridoma (FERM ABP-10264).

8. (Currently amended) The method for detecting milk allergens according to ~~any one of claims~~ claim 4 ~~to~~ 7, wherein the native α s1 casein and the urea-treated α s1 casein in foods can be analyzed qualitatively and quantitatively even at a concentration in a range of 10 to 1000 ppb by sandwich ELISA.

9. (Currently amended) The method for detecting milk allergens according to claim 2 ~~or~~ 3, wherein the monoclonal antibody recognizing native milk allergens and/or denatured milk allergens is an anti- β -lactoglobulin monoclonal antibody.

10. (Original) The method for detecting milk allergens according to claim 9, wherein the anti- β -lactoglobulin monoclonal antibody recognizes a native β -lactoglobulin, an urea-treated β -lactoglobulin, and a reduced-carboxymethylated β -lactoglobulin.

11. (Currently amended) The method for detecting milk allergens according to claim 9 ~~or 10~~, wherein the anti- β -lactoglobulin monoclonal antibody is the anti- β -lactoglobulin monoclonal antibody P β GL1 produced by hybridoma (FERM ABP-10281) and/or the anti- β -lactoglobulin monoclonal antibody P β GL2 produced by hybridoma (FERM ABP-10282) and/or the anti- β -lactoglobulin monoclonal antibody P β GL3 produced by hybridoma (FERM ABP-10283).

12. (Currently amended) The method for detecting milk allergens according to ~~any one of claims~~ claim 9 ~~to 11~~, wherein the native β -lactoglobulin and the urea-treated β -lactoglobulin in foods can be analyzed qualitatively and quantitatively even at a concentration in a range of 30 to 1000 ppb by sandwich ELISA.

13. (Currently amended) The method for detecting milk allergens according to ~~any one of claims~~ claim 2 ~~to 12~~, wherein a casein and/or a whey protein is extracted with the use of urea and 2-mercaptoethanol from a sample.

14. (Currently amended) The method for detecting milk allergens according to ~~any one of claims~~ 1 ~~to 13~~, wherein 1 or more monoclonal antibodies recognizing a native casein and 1 or more monoclonal antibodies recognizing a denatured casein and 1 or more

monoclonal antibodies recognizing a native β -lactoglobulin and 1 or more monoclonal antibodies recognizing a denatured β -lactoglobulin are used.

15. (Original) A kit for detecting milk allergens comprising a monoclonal antibody recognizing native milk allergens and a monoclonal antibody recognizing denatured milk allergens, which is used under a condition that a monoclonal antibody recognizing native milk allergens and a monoclonal antibody recognizing denatured milk allergens are used in combination.

16. (Original) The kit for detecting milk allergens according to claim 15, comprising 2 or more monoclonal antibodies recognizing different epitopes as monoclonal antibodies recognizing native milk allergens and/or denatured milk allergens.

17. (Currently amended) The kit for detecting milk allergens according to claim 15 ~~or 16~~, wherein the monoclonal antibody recognizing native milk allergens and/or denatured milk allergens is an anti- α s1 casein monoclonal antibody.

18. (Original) The kit for detecting milk allergens according to claim 17, wherein the anti- α s1 casein monoclonal antibody recognizes a native α s1 casein, an urea-treated α s1 casein, a native sodium casein, and a denatured sodium casein.

19. (Currently amended) The kit for detecting milk allergens according to claim 17 ~~or 18~~, wherein the anti- α s1 casein monoclonal

antibody recognizes the 132 - 193 position of the amino acid sequence of α s1 casein shown by SEQ ID NO:1.

20. (Currently amended) The kit for detecting milk allergens according to ~~any one of claims 17 to 19~~, wherein the anti- α s1 casein monoclonal antibody is the anti- α s1 casein monoclonal antibody Pas1CN1 produced by hybridoma (FERM ABP-10263) and/or the anti- α s1 casein monoclonal antibody Pas1CN2 produced by hybridoma (FERM ABP-10264).

21-102. (Canceled)